Unit 6 Lesson 3AB Homework Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Math:\_\_\_\_\_\_

**Lesson 3A: Rates and Unit Rates**

1. John runs 6 miles in 42 minutes.
   1. What is his speed in miles per minute?
   2. What is his speed in minutes per mile?
2. Erin earned $525 for 21 hours of work.
   1. What is her hourly wage?
   2. Bill says that she will earn $175 for 7 hours of work. Is he correct? Why or why not?
3. For each given rate, fill in the table and use the table to create a graph for that rate.

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| --- | --- |
| **Apples cost $2 per pound at the orchard.** | **Apples cost $3 per pound at the store.** |
| |  |  | | --- | --- | | Pounds of apples | $ | |  |  | |  |  | |  |  | | |  |  | | --- | --- | | Pounds of apples | $ | |  |  | |  |  | |  |  | |
|  |  |

1. For each graph, write an equation to represent the relationship between the number of pounds and the price being paid.
   1. Orchard: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Store: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Lesson 3B: Rate Word Problems**

1. The distance between two cities is 216 kilometers. It takes Mr. Skoblar 4 hours to travel this distance on his motorcycle. Solve for the average speed per hour.
2. Karen walks home from school at a speed of 5 kilometers per **hour**. She takes 12 minutes to reach her school. What is the distance between her home and the school?
3. Ryoko, Sakina, and Amine are each assigned to sell cookies at different recesses during the school day. Ryoko sells 20 cookies at the 15-minute morning break. Sakina sells 15 cookies at the 20-minute lunch recess, and Amine sells 25 cookies for 30 minutes after school. Who sells the most cookies per minute? Show how you got your answer through a diagram, model, or written explanation.
4. Sakina says, “Ryoko, we sold the same number of cookies per minute!” Explain to Sakina the mistake she made in this calculation, and show her what she had to do instead.
5. Amine believes that he sold the most cookies per minute because he sold cookies for the longest period of time. Explain to Amine why his thinking is incorrect.